

METHODS AND APPARATUS FOR RANDOMLY
MODULATING RADAR ALTIMETERS

ABSTRACT OF THE DISCLOSURE

5 A method for randomly phase modulating a radar altimeter is described. The method includes momentarily applying a signal from a random noise source to an amplifier, applying an output of the amplifier to a voltage controlled oscillator (VCO), applying an output of the VCO to a transmitter and mixer of the radar altimeter to modulate transmissions of the radar altimeter and to demodulate reflected radar transmissions received by the radar altimeter and holding the output of the amplifier constant from before a radar altimeter transmission until after reception of the reflected radar signals from that transmission by the radar altimeter. The method further includes repeating the applying steps and the holding step.